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Winter residents increase 8 percent in 1988-89

An estimated 96,400 seasonal residents were living in the mobile home and RV/travel trailer parks in the Phoenix metropolitan area (including the Apache Junction area of Pinal County) at the height of the 1988-89 season. This represents a 8 percent increase over the previous year, in spite of the fact that the Arizona economy was experiencing a marked slowdown in permanent in-migration.

These findings are based upon an annual census of mobile home and RV/travel trailer parks, conducted since 1983-84 as part of ongoing ASU College of Business research on seasonal migration and its impact on the local economy. During the second week of February, questionnaires were mailed to the parks in the Phoenix area asking about the number of spaces, occupancy rates, spaces currently occupied by seasonal residents, and the number of months in which the occupancy rate was 90 percent or greater. Follow-up phone and mail surveys attempted to contact those parks not responding to the original mailing. Usable information was obtained from 333 of the 666 known parks in the Phoenix area, representing 82 percent of the total spaces.

RESULTS

Table 1 (page 2) presents the number of mobile home and RV/travel trailer spaces, occupancy rates, and number of winter residents by geographical area for the first week of February 1989. The total number of park spaces in the Phoenix area declined slightly during the past year to 98,200; there were 300 fewer mobile home spaces in the East Valley, 600 fewer in Phoenix, and 500 fewer in the West Valley. This decrease is partially due to the closing of 10 parks and the fact that no new parks were added during the past year. In addition, a sizable number of parks had lower occupancy of mobile home spaces, possibly associated with the ongoing contraction of the construction sector and a resulting exodus of construction workers. Many of these parks designated former mobile home spaces as RV/travel trailer spaces to be occupied by 1988-89 winter residents.

Economic impact still strong

The occupancy rate for mobile home spaces across the Valley remained at 85 percent, while the occupancy rate for RV/travel trailer spaces rose from 84 percent at the height of last year's season to 90 percent in February 1989. In seeking reasons for the increased occupancy levels, it appears that several of the big parks that had difficulty in filling up in previous years experienced a higher level of demand for RV/travel trailer spaces this year. The 15 parks in the Valley with 1,000 spaces or more showed sharp increases in RV/travel trailer occupancy rates compared to the 1987-88 season.

In addition to higher occupancy rates in the RV/travel trailer parks, the percent of spaces occupied by winter residents also increased substantially for the 1988-89 season. Valleywide, the proportion of spaces occupied by seasonal residents rose from 53 to 56 percent, with increases from 67 to 70 percent in the East Valley, 20 to 25 percent in Phoenix, and from 31 to 34 percent in the West Valley.

With both higher occupancy rates and a greater proportion of spaces occupied by winter residents, the estimated number of snowbird households increased to 48,200 in 1989—8 percent above the 1988 estimate of 44,500. Assuming two persons per household, as indicated by our previous research, this household estimate implies that there were more than 96,000 seasonal residents living in Valley parks at the height of the 1988-89 winter season.

This year's results run counter to expectations prior to conducting the census in February. Last year, the estimated number of winter resident households declined, even though the total number of occupied spaces had increased. At the time (see *Arizona Business*, June 1988), it was surmised that fewer households living in the parks were being identified as seasonal residents since more were becoming permanent residents of Arizona. During the 1988-89 season, any such trend was swamped by an influx of additional winter residents that more than replaced declines in mobile home occupancy rates related to the local economic slowdown. Prosperous economic conditions and harsh winter weather in many of the states from which Arizona

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draws winter visitors apparently stimulated the flow of elderly seasonal residents to the Valley of the Sun during the past winter.

The increased numbers of seasonal residents in Phoenix area parks seems to have resulted in a change in the occupancy pattern relative to the 1987-88 season. Table 2 displays the number of months that East Valley parks were full during this past season. The proportion of parks that were full for two months or less rose considerably (15 versus 0 percent for mobile home parks, 37 versus 15 for RV/travel trailer parks, and 22 versus 8 percent for mixed parks). The proportion of parks reporting that they were full for 3 to 5 months of the year also fell compared with the previous year. It appears that the new winter residents are not staying as long or that there are fewer snowbirds passing through the parks during off-peak months.

Park managers were asked whether they had more or fewer winter residents this February compared to the previous season (see Table 3). The proportion of parks reporting more snowbirds increased across the Valley, and the percent of parks with fewer seasonal residents than in 1988 fell in all three areas, further confirming that the number of park snowbirds increased during the 1988-89 season.

TOTAL WINTER RESIDENT POPULATION

The ASU Winter Resident Project concentrates on the population of predominantly elderly seasonal residents who stay in mobile home and RV/travel trailer parks—the most visible and single largest group of snowbirds in the Phoenix area. But substantial numbers of visitors come to the Valley of the Sun each winter and stay in seasonal apartment complexes, in homes or condos that they rent or own, with friends or relatives, or in hotels/motels/resorts. Unfortunately, enumerating these non-park snowbirds is very difficult and costly, and accurate estimates of their numbers are simply not available. For the past several years, the total number of snowbirds in the Phoenix area has been estimated using information from a survey undertaken for Western Savings during the 1985-86 season and reported in *Forecast 86*. The proportion of the total winter resident population residing in mobile home/RV/travel trailer parks reported in this 1985 survey implies that in February 1989, there were approximately 103,000 snowbird households or 206,000 winter residents staying in the Valley of the Sun.

This estimate of the total seasonal resident population should be viewed with caution for two reasons. First, the information on living arrangements of snowbird households is based upon a sample of only 500 households, not a large comprehensive study. Second, the survey was conducted in 1985, and there is a strong probability that the pattern of living arrangements by seasonal resident households has changed in the past 4 years. Until better information is available, estimates of the total number of winter residents in the Phoenix area will remain, at best, educated guesses.

ECONOMIC CONTRIBUTION

The relative benefits versus costs associated with the arrival of the snowbirds each winter remains a controversial issue. Every year, questions are raised concerning the seasonal congestion of the area's roads and other facilities, and whether the snowbirds pay their fair share of taxes.

On the benefit side, it is clear that the expenditures of seasonal residents (and tourism in general) provide a very important stimulus to the local economy each winter. During the 1986-87 season, households in four East Valley parks were surveyed to derive information on length of stay and household expenditure patterns. The results indicated an average length of stay of approximately 4 months and average monthly expenditures of approximately $1,000 per household during their stay. Based upon these findings, the estimate of 48,200 households staying in area parks implies that park snowbirds injected $193 million in consumer spending into the local economy during the 1988-89 season.

This total expenditure figure is a conservative estimate since (1) it does not include any monies spent locally to purchase mobile homes, RVs, or travel trailers; (2) medicare payments and other third-party reimbursements to local providers are not counted; and (3) it assumes that rent is paid only for the average length of stay even though many snowbird households rent spaces on a yearly basis.

TABLE 1

WINTER RESIDENTS IN METROPOLITAN PHOENIX MOBILE HOME AND TRAVEL TRAILER/RV PARKS
1988-1989 Census by Geographic Area

	East	*Phoenix*	*West*	*Total*
Number of Mobile Home Spaces	31,000	15,700	10,200	57,000
Occupancy Rate	82%	93%	85%	85%
Number of Travel Trailer/RV Spaces	33,700	2,600	4,900	41,200
Occupancy Rate	92%	88%	78%	90%
Number of Occupied Spaces	56,700	16,600	12,500	85,800
Percent of Spaces Occupied by Winter Residents	70%	25%	34%	56%
Number of Winter Resident Households	39,700	4,200	4,300	48,200

TABLE 2

DURATION OF 90 PERCENT OR MORE OCCUPANCY
By Type of Park, East Valley

Months	*Mobile Home Parks*	*Travel Trailer RV Parks*	*Mixed Parks*	*All Parks*
0 or 1	12%	17%	11%	12%
2	3	20	11	11
3	3	13	7	8
4	3	17	7	8
5	6	7	11	8
6	15	20	23	19
7 or more	58	6	30	34
TOTAL	100	100	100	100
MEDIAN	8 months	3 months	6 months	6 months

Source (Tables 1 & 2): Census conducted by the authors, February 1989.

To address the question concerning taxes paid by winter residents, revenues from four major taxes paid by snowbird households—sales, rental occupancy, motor fuel, and utility taxes—during their stays in the Valley of the Sun during the 1988-89 season were estimated (Table 4). The estimated revenues collected by these four taxes from the park winter residents total more than $10 million. Like the expenditure estimates, this estimate of tax revenues collected from the snowbird population residing in area parks is very conservative, since it does not by any means include all of the taxes directly paid or indirectly generated by the seasonal resident population. For example, it does not include: (1) property taxes; (2) sales taxes on mobile home/RV/travel trailer purchases; (3) income taxes earned from local sources; (4) registration fees for vehicles left in Arizona; and (5) luxury taxes on such items as tobacco and alcoholic beverages.

TABLE 3

COMPARISON OF WINTER VISITOR BUSINESS
1988-89 VERSUS 1987-88 SEASONS
By Geographical Area

	East Valley	*Phoenix*	*West Valley*	*Total*
Parks with more seasonal residents than in 1986-87	25%	8%	16%	20%
Parks with similar numbers of seasonal residents	59	69	67	62
Parks with fewer seasonal residents than in 1986-87	10	17	7	11
Not Applicable/No Answer	6	6	10	7
TOTAL	100	100	100	100

Source: Census conducted by the authors, February 1989.

TABLE 4

ESTIMATED STATE AND LOCAL TAX REVENUES
FROM FOUR MAJOR SOURCES
1988-89 Season

Sales Tax	$ 3,600,000
Rental Occupancy Tax	4,100,000
Motor Fuel Tax	1,200,000
Utility Taxes	1,400,000
TOTAL	10,300,000

Source: Based upon household expenditure information collected by in-park household surveys conducted by the authors, 1986-87.

CURRENT AND FUTURE RESEARCH

This winter season, in addition to the park census, household surveys were conducted in 14 parks. The sample of parks was chosen to mirror the size distribution and the mix of mobile home and RV/travel trailer parks in the overall park population. This expansion of the household survey will provide a more precise and comprehensive view of the snowbird population and more accurate estimates of the economic impact of the seasonal resident population upon the Phoenix area. The survey data are now being processed, and the findings will be reported in an upcoming issue of *Arizona Business*.

Judging from the volume of requests for data concerning the snowbird population, it appears that many businesses, public agencies, and individuals are interested in obtaining more information about the state's winter resident population. Current public data collection activities, however, such as the decennial census, do not collect data that allow study of seasonal populations. Until a more comprehensive research effort directed at analyzing and monitoring the annual influx of seasonal residents can be established, many of the questions asked about this large and growing (but part-time) segment of Arizona's population will remain unanswered. The current ASU Winter Resident Project studies only the portion of the snowbird population that stays in Valley mobile home/RV/travel trailer parks, which the *Forecast 86* survey data indicate comprise only one-half of the total winter resident population. Unfortunately, current sponsorship is not sufficient to expand the research to include study of the seasonal residents living in other accommodations. Ideally, an ongoing telephone survey of area households could provide valuable information about the Valley's seasonal population, as well as current data on permanent residents not available from existing public sources.

– Stephen K. Happel
– Timothy D. Hogan

Dr. Happel is Associate Professor of Economics and Dr. Hogan is Professor of Economics and Director of the Center for Business Research in the ASU College of Business.

The authors gratefully acknowledge the sponsorship of this year's efforts by the Salt River Project, the Arizona Office of Tourism and Western Savings, and the cooperation of the park owners/managers who provided information relating to their parks. We would also like to thank Susan Lewis, Andea Hlosek, Jill McPheters, and Sally Weschler for their help on the survey.

For more detailed information about the ASU Winter Resident Project, contact the Center for Business Research (602-965-3961).

Conference on
The 1987 Economic Census
May 23, 1989

To acquaint businesses and individuals with the wealth of business information available from the Economic Censuses, the U.S. Census Bureau, the Arizona State Data Center and the Phoenix Chamber of Commerce will conduct a conference May 23, 1989 at the Westcourt at the Buttes Hotel in Tempe. The registration fee for the one-day conference is $30.00. To register or to obtain more information, call the Phoenix Chamber of Commerce at (602) 254-5521, ext. 137.

Valley inflation lowers a bit in first quarter

Prices of Phoenix area goods and services rose a moderate 1.1 percent during first quarter 1989, dropping back into the 0.7 to 1.3 percent-per-quarter range experienced during much of 1987 and 1988. The greater increase in fourth quarter 1988 (see Table 1) seems to have been an aberration.

Before seasonal adjustment, the Metropolitan Phoenix Consumer Price Index climbed 1.0 percent to 123.7 (1982–84 =100). The annual increase reached 5.4 percent, the most since mid-1985, but this rate is unlikely to advance much further in 1989. Relatively large increases in the second and fourth quarters of 1988 are unlikely to be exceeded in 1989.

TABLE 1

PERCENT CHANGES IN METROPOLITAN PHOENIX CONSUMER PRICE INDEX

Expenditure Category	*Relative Importance*	Seasonally Adjusted from Preceding Quarter *1st 1988*	*2nd 1988*	*3rd 1988*	*4th 1988*	*1st 1989*
ALL ITEMS	100.0	0.8	1.3	0.9	2.0	1.1
Food and Beverages	16.5	0.9	2.0	1.3	1.4	1.9
Housing	41.7	1.0	0.2	0.4	1.7	–0.1
Apparel and Upkeep	6.1	2.3	2.9	3.6	1.5	0.7
Transportation	19.3	–0.5	2.4	1.0	3.1	3.0
Medical Care	6.8	0.3	3.3	0.4	2.8	1.2
Entertainment	4.6	1.2	0.1	1.2	3.6	2.1
Other Goods and Services	5.0	2.2	0.9	0.8	1.1	1.2

TABLE 2

METROPOLITAN PHOENIX CONSUMER PRICE INDEX
First Quarter 1989

Expenditure Category	Index (1982-84 = 100) *Last Quarter*	*This Quarter*	Percent Change from *Last Quarter**	*Year-Ago Quarter*
ALL ITEMS	122.5	123.7	1.1	5.4
Food and Beverages	121.7	124.3	1.9	6.6
Food	120.6	123.5	2.2	6.9
Food at Home	123.4	128.1	3.5	9.1
Cereal and Bakery Products	133.2	140.5	4.1	6.1
Meats, Poultry, Fish, and Eggs	116.5	119.2	2.5	9.4
Dairy Products	111.3	116.2	4.4	2.7
Fruits and Vegetables	158.2	171.3	8.6	35.0
Other Food at Home	115.8	117.3	–0.1	1.8
Food Away from Home	117.6	118.3	0.6	3.8
Housing	117.0	116.6	–0.1	2.5
Shelter	115.6	116.5	0.8	0.6
Renters' Costs**	116.9	116.5	–0.3	–2.6
Homeowners' Costs**	119.1	120.5	1.2	2.1
Fuel and Other Utilities	121.2	114.5	–2.4	6.0
Gas (piped) and Electricity	115.3	105.6	–2.8	4.8
Household Furnishings/Operations	116.8	118.0	–0.7	4.4
Apparel and Upkeep	124.7	125.4	0.7	9.4
Transportation	120.7	124.6	3.0	9.6
Private Transportation	120.1	124.2	2.3	8.6
New and Used Cars	132.8	136.3	2.1	6.8
Motor Fuels	75.5	77.6	0.8	5.3
Public Transportation	118.8	121.9	5.7	14.7
Medical Care	150.8	153.1	1.2	7.6
Entertainment	144.9	147.7	2.1	6.3
Other Goods and Services	134.3	135.9	1.2	4.0

*Seasonally adjusted.
**Base period is second quarter 1983.

Source (Tables 1 & 2): Compiled by the Center for Business Research, College of Business, Arizona State University; in co-sponsorship with Valley National Bank.

COMPONENT INDEXES

Most of the CPI increase can be traced to just two major categories: transportation and food and beverages. In the latter case, higher inflation was limited to grocery items, with some foodstuffs still feeling the effects of the 1988 drought.

Food and Beverages

The 3.5 percent increase in food at home prices was the greatest in more than five years. Sizeable gains occurred in four of its five major subcategories (see Table 2). The jump in prices of dairy products was the most in at least five years while the boost in fruit and vegetable prices was the fifth successive large increase. Produce prices in first quarter 1989 were 35 percent higher than in first quarter 1988.

In contrast, food away from home prices rose only 0.6 percent and prices of alcoholic beverages declined 0.3 percent.

Housing

Housing costs fell for the first time since fourth quarter 1985. Renters' costs, prices of household furnishings and operations, and fuel and other utility costs all declined. Only homeowners' costs rose, though the 1.2 percent advance brought the annual gain to only 2.1 percent.

Transportation

Transportation costs jumped 3 percent, the second straight large increase. Used car prices soared and auto insurance premiums continued to surge; the advance totalled 25 percent in the four quarters through first quarter 1989. Public transportation fares rose nearly 6 percent in the first quarter and 15 percent during the last four quarters. Though not as large, the increase in vehicle finance charges was the most in four and one-half years.

Medical Care

Despite the biggest health insurance premium hike in four years and a big gain in prescription drug prices, medical care costs rose moderately. Professional medical services fees hardly changed.

Other Categories

Apparel and upkeep cost increases lessened for the second straight quarter. Inflation in the other goods and services category remained moderate, while gains in the entertainment category continued to outpace the all-items average.

COMPARISON AREAS

Before seasonal adjustment, inflation in the first quarter was about equal to the national average (see Table 3). Higher inflation in the transportation and apparel and upkeep categories was offset by lower inflation in most other categories. The annual inflation rate remained slightly higher in the Phoenix area, again primarily due to the transportation and apparel categories.

OUTLOOK

The first quarter inflation rate was lower than expected, but may be made up in the second quarter. Then inflation probably will be at the upper end of the 1.0 to 1.5 percent quarterly range assumed for the rest of 1989, resulting in an annual inflation rate for 1989 of about 5 percent.

– Tom R. Rex
Research Manager

TABLE 3

METROPOLITAN PHOENIX AND UNITED STATES CONSUMER PRICE INDEXES
First Quarter 1989

	Percent Change from Last Quarter*		Percent Change from One Year Ago	
Expenditure Category	*Phoenix*	*United States*	*Phoenix*	*United States*
ALL ITEMS	1.0	1.1	5.4	4.8
Food and Beverages	2.1	2.1	6.6	6.0
Housing	–0.3	1.0	2.5	3.9
Apparel and Upkeep	0.6	–3.8	9.4	4.6
Transportation	3.2	0.8	9.6	4.5
Medical Care	1.5	2.4	7.6	7.2
Entertainment	1.9	1.7	6.3	5.1
Other Goods and Services	1.2	2.2	4.0	7.4

*Not seasonally adjusted

Source: Metropolitan Phoenix data compiled by the Center for Business Research, College of Business, Arizona State University, in cosponsorship with Valley National Bank; other data are from the U.S. Department of Labor, Bureau of Labor Statistics.

Weak retail sales continued in 1988

Retail sales growth in Arizona continued to flounder in 1988, further exacerbating the state's budget problems.

As seen in Table 1, nearly two-thirds of the sales occurred in the Phoenix area, with the rest nearly evenly split between the Tucson area and rural Arizona. Among the rural counties, Coconino registered the greatest sales in each category, accounting for 4.3 percent of restaurant and bar sales — well above the level of next-ranked Yavapai County — and 2.6 percent of retail sales, barely higher than Yuma County's total.

In 1988, statewide retail sales rose 4.7 percent; restaurant and bar sales gained 5.1 percent. Neither figure was much above the 4.1 percent inflation rate measured both nationwide and in the Phoenix area. Once population growth of 2.2 percent is factored in, real per capita sales declined.

This was the second consecutive year of marginal inflation-adjusted gains and declines on a real per capita basis. The situation was worse in Maricopa County (see Table 2), where real per capita sales declined for the third straight year.

Sales were particularly weak between July and October, probably the result of the numerous layoffs experienced during the spring and summer. Holiday season sales perked up a bit, but were flat compared to the prior year on a real per capita basis.

TABLE 1

1988 TAXABLE SALES
(In Millions of Dollars)

	Retail	Share of State	Restaurant and Bar	Share of State
ARIZONA	$16,135	100.0%	$2,720	100.0%
Maricopa	10,502	65.1	1,720	63.3
Pima	2,849	17.7	502	18.4
Non-metropolitan	2,784	17.2	498	18.3

Source (Tables 1, 2 & 3): Center for Business Research, College of Business, Arizona State University from Arizona Department of Revenue data.

TABLE 2

1988 PERCENT CHANGE IN TAXABLE SALES ON AN INFLATION-ADJUSTED PER CAPITA BASIS

	Retail	Restaurant and Bar
ARIZONA	–1.6%	–1.2%
Maricopa	–2.3	–1.8
Pima	–1.9	–0.5
Non-metro	1.3	0.8

TABLE 3

1988 TAXABLE SALES PER CAPITA

	Retail	Restaurant and Bar
ARIZONA	$4,601	$776
Maricopa	5,212	854
Pima	4,356	767
Non-metro	3,363	601

The weakness in retail sales has varied widely by category. Sales at general merchandise stores and, to a lesser extent, at apparel and accessory stores have held up well. In contrast, sales of "big -ticket" items such as autos and furniture were below year-earlier levels, even before inflation and population adjustment.

Tourism, which has remained healthy, has positively affected retail sales. Tourist spending boosts the level of per person sales shown in Table 3.

– Tom R. Rex
Research Manager

Coincident index growth slows in January

Economic growth across Arizona slowed in January following three months of strong gains. Preliminary data for February suggests another sluggish month, perhaps poorer than in January. Thus, the burst of growth in fall 1988 merely offset the extremely weak conditions during spring and summer 1988.

The coincident economic index for the Phoenix area rose a modest 0.2 percent in January; the index reached 150.7 (1982=100). The advance in the Tucson area was slightly less at 0.1 percent, putting the index at 141.1. Non-urban Arizona's growth rate was the fastest in the state for the third time in four months, climbing 0.4 percent in January; the index hit 133.4.

Employment rose in each area in January. Retail sales improved a bit in Maricopa County, but fell elsewhere. Likewise, the unemployment rate dipped in the Phoenix area, but worsened in the rest of the state. The value of commercial building permits, however, plunged in the Phoenix area to the second lowest value since 1982. In contrast, the value rose elsewhere; Pima County registered the third straight month of relatively strong commercial building permit activity.

In the four months through January, expansion of the coincident indexes was greatest in rural Arizona and least in Maricopa County. The biggest difference occurred in the employment component, though the building permit indicator was weakest in Maricopa County and the unemployment component was strongest in rural Arizona.

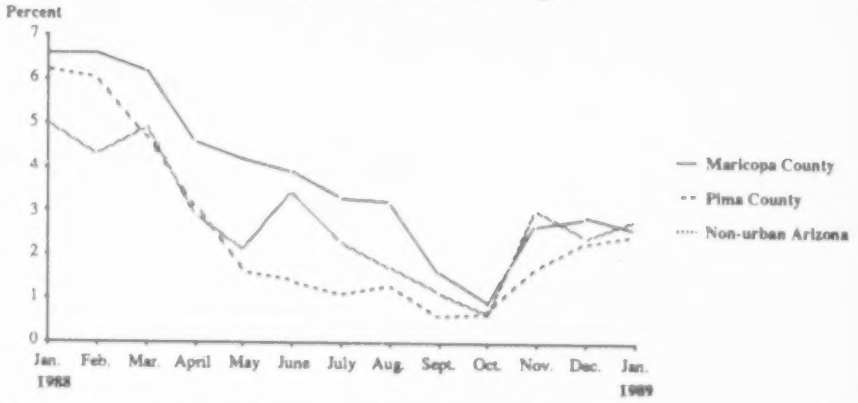
The annual growth rates shown in Figure I illustrate the deceleration of economic growth during 1988, to rates less than 1 percent. Though the annual rates have recovered somewhat, they seem to have stabilized around 2.5 percent in each of Arizona's geographic areas.

The composite index for the state rose 0.2 percent in January to 145.9, 2.5 percent higher than in January 1988.

– Tom R. Rex
Research Manager

FIGURE I

COINCIDENT ECONOMIC INDEXES
Year-to-Year Percent Changes



Source: Center for Business Research, College of Business, Arizona State University.

March purchasing indicators show encouraging signs

With the coming of spring, the Arizona economy appears to be working out of its stall and is showing the first signs of a higher growth rate. New orders received showed the strongest growth since last August, reversing four months of no growth. Production started up again after three months of very sluggish performance. Employment registered zero growth, after four consecutive monthly declines. Inflation still is present, but the rate of price increases is holding steady. March turned in the best overall economic performance since early last fall.

While one month's positive economic performance is no guarantee that it will continue, the growth rate of the Arizona economy is stepping up. The Arizona economy will not enjoy a sharp rebound and the growth rate likely will be slower than desired, but the economy should get stronger as the year develops.

– Harold Fearon

Dr. Fearon is the National Association of Purchasing Management Professor in the ASU College of Business.

TABLE 1

MARCH PURCHASING SURVEY

	Percent of Purchasing Managers Indicating Each Response (March compared to February)		
Key Indicators	*Higher*	*Same*	*Lower*
Prices paid for major commodities	47	50	3
Delivery time from vendors	32	62	6
Purchased materials inventory level	31	41	28
New orders received	35	45	20
Production	29	51	20
Employment	17	66	17
Purchases	37	38	25

Source: Purchasing Management Association of Arizona and the Purchasing Management Association of Southern Arizona.

Arizona leading index declines in February

The Arizona Index of Leading Economic Indicators fell again in February to 118.3. The February number was 0.6 percent lower than the revised 119.0 number for January 1989 (1982 = 100). The revised index has declined for two months after being flat in December.

Residential building permits, the money supply, production, new orders, employment, and delivery times had a negative impact. Sensitive prices, manufacturing hours worked, and inventories were positive influences.

REVISIONS

Two changes were made in the index this month. First, initial claims for unemployment insurance were dropped from the index because the Arizona Department of Economic Security is currently unable to supply the information. Also, the base year of the index was changed to 1982 from 1977.

The loss of the initial unemployment insurance claims series will hopefully only be temporary. It will be reintroduced to the index as soon as it becomes available. In addition, we will be investigating other ways to strengthen the index.

The base has been changed to simplify comparison with the national leading index which also has a base year of 1982. The adjusted index is calculated by dividing each unadjusted index value by the average value of the index in the base year.

OUTLOOK

The revised Arizona Leading Index has declined for two straight months, primarily as a result of weak residential building permit numbers and a falling money supply.

Residential building permit numbers continue to be erratic. There is some evidence in the construction employment data that the loss of construction jobs is slowing. However, construction will continue to be a drag on the Arizona economy for some time to come.

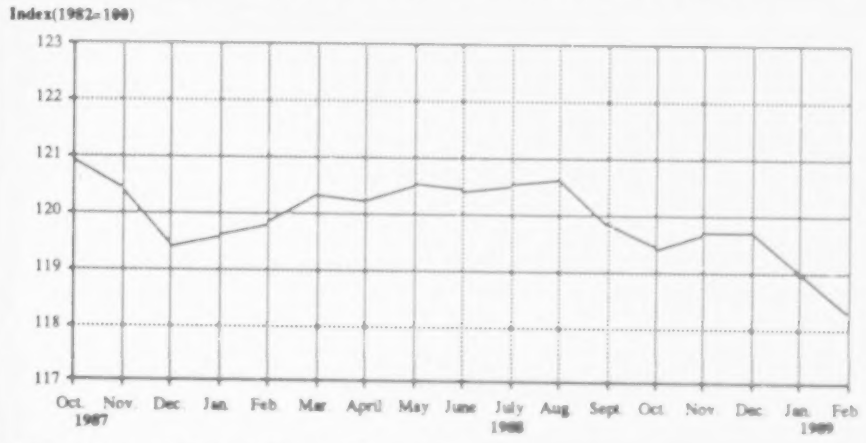
The money supply has fallen for two months, indicating that the Federal Reserve is acting to restrain the economy in order to put the brakes on inflation. The Fed is walking a tightrope between slowing the economy enough to affect inflation and slowing the economy so much that it is thrown into a painful recession.

The index suggests continued weakness in the state's economy, leaving Arizona still vulnerable to a slowdown in the national economy.

– **Tracy L. Clark,** *Economist*
Economic Outlook Center

FIGURE 1

ARIZONA INDEX OF LEADING ECONOMIC INDICATORS



Source: Economic Outlook Center, College of Business, Arizona State University; sponsored by Citibank (Arizona).

TABLE 1

NET CONTRIBUTION OF INDIVIDUAL COMPONENTS TO THE ARIZONA INDEX OF LEADING ECONOMIC INDICATORS

	Net Contribution*			
	Nov.	*Dec.*	*Jan.*	*Feb.*
Delivery Time*	.00	.02	–.01	–.02
Inventory Levels*	–.10	–.09	.11	.02
New Orders*	–.02	–.05	–.04	–.07
Production*	–.01	–.06	–.14	–.09
Employment*	–.01	–.03	–.03	–.06
Residential Building Permits	.16	.09	–.09	–.36
Average Workweek, Manufacturing	.14	.00	–.10	.07
Money Supply	.16	.01	–.34	–.13
Change in Sensitive Materials Prices	–.01	.04	.07	.11
OVERALL INDEX CHANGE (%)	.30	–.06	–.57	–.54

* The net contribution of each component is calculated by multiplying the monthly percent change in its index by its relative importance.

*Based on indicators from the Purchasing Management Associations of Arizona and southern Arizona.

Source: Economic Outlook Center, College of Business, Arizona State University; sponsored by Citibank (Arizona).

The Arizona leading index is based on 9 economic indicators, combined and weighted to project the pace of economic activity several months ahead. Five of the components come from a monthly survey of Arizona purchasing managers conducted by Dr. Harold Fearon. The Arizona Index of Leading Economic Indicators is sponsored by Citibank (Arizona).

ARIZONA ECONOMIC INDICATORS

	Month or Quarter	Value	Percent Change from Previous Period	Percent Change from Year Ago	Year-to-Date Value	Year-to-Date Percent Change from Year Ago
GROSS STATE PRODUCT (In Billions of Dollars, at Annual Rate)						
Arizona - Current Dollars	3rd Qtr.	60.034	1.6	5.4	NA	NA
Arizona - 1982 Dollars	3rd Qtr.	48.002	0.7	1.5	NA	NA
COINCIDENT ECONOMIC INDEXES (1982 = 100)						
Arizona	Jan.	145.9	0.2	2.5	NA	NA
Metropolitan Phoenix	Jan.	150.7	0.2	2.6	NA	NA
Metropolitan Tucson	Jan.	141.1	0.1	2.5	NA	NA
Non-urban Arizona	Jan.	133.4	0.4	2.8	NA	NA
CONSUMER PRICE INDEX (1982-84 = 100)						
Metropolitan Phoenix	1st Qtr.	123.7	1.0	5.4	NA	NA
INDEX OF LEADING ECONOMIC INDICATORS (1977 = 100)						
Arizona	Feb.	118.3	-0.6	-1.3	NA	NA
BUILDING PERMITS (Total Dollar Value in Thousands)						
Maricopa County	Jan.	232,883	1	27	232,883	27
Pima County	Jan.	33,641	20	27	33,641	27
Balance of State	Jan.	38,556	-54	22	38,556	22
Arizona	Jan.	305,080	-11	27	305,080	27
TOTAL HOUSING UNITS AUTHORIZED						
Maricopa County	Jan.	868	-30	-27	868	-27
Pima County	Jan.	210	2	-10	210	-10
Balance of State	Jan.	566	-10	-29	566	-29
Arizona	Jan.	1,644	-20	-26	1,644	-26
HOME SALES						
Maricopa County - Number	Feb.	3,360	-10	-11	7,110	0
Maricopa County - Median Price	Feb.	79,150	-3.8	-1.1	80,800	0.7
HOUSING AFFORDABILITY INDEXES						
Metropolitan Phoenix - New Homes	4th Qtr.	91	1.1	11.0	NA	NA
Metropolitan Phoenix - Resale Homes	4th Qtr.	123	3.4	8.8	NA	NA
MORTGAGE INTEREST RATES (Conventional, 30-year, Fixed-rate)						
Maricopa County	March	11.1	3.7	12.1	NA	NA
POPULATION ESTIMATES (In Thousands)						
Maricopa County	4th Qtr.	2,037	0.6	2.2	NA	NA
Arizona	4th Qtr.	3,534	0.8	2.2	NA	NA
ELECTRICAL POWER SALES (In Millions of Kilowatt Hours)						
Arizona	Feb.	3,015	-16.1	4.1	6,611	6.1

NA = Not Applicable

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